VIA Technology Forum

VIA Connect Client Platforms

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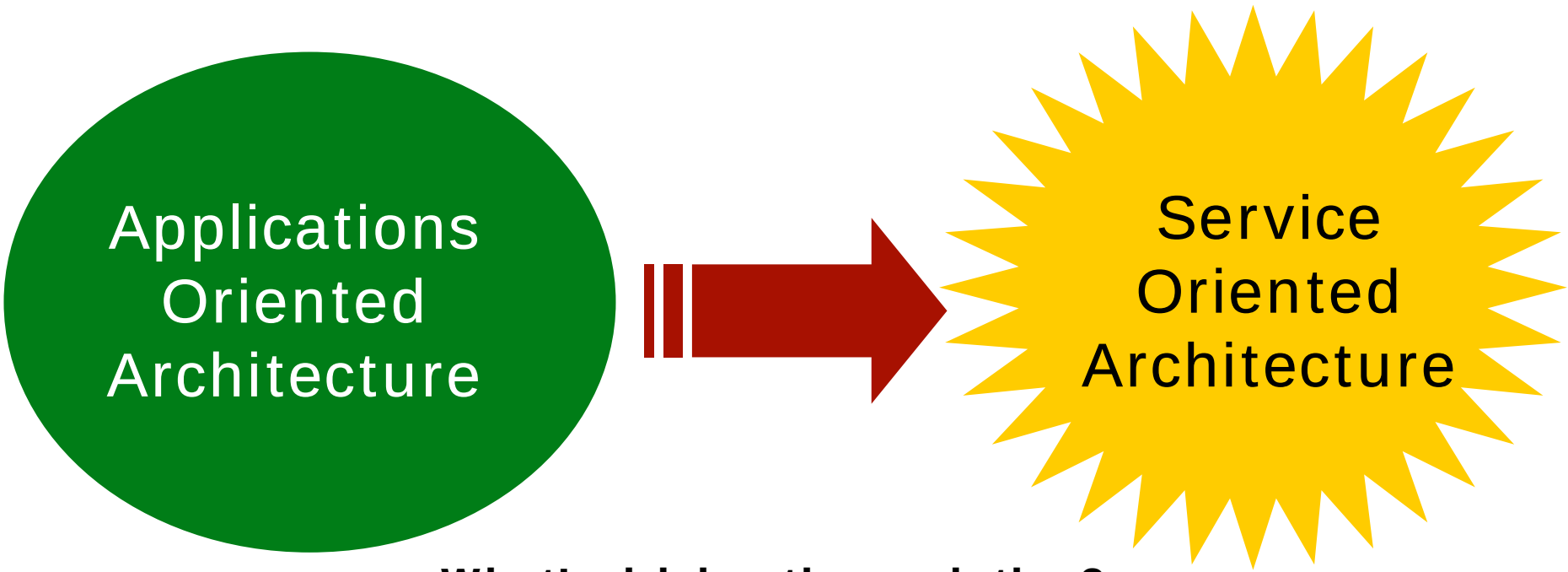
Agenda

- **Changes and Challenges in Enterprise Environment**
  - The Workplace of Tomorrow
  - Enterprise Challenges
  - Demand for Higher-Level Security, Better Infrastructure, and Lower TCO
- **VIA Connected Client Computing Initiative**
  - The Vision
  - VIA Connected Client Platform Benefits
  - Customer success with VIA
- **Call to Action**

The Next Step in Enterprise Evolution

Applications are stored and executed locally on employee PCs – data is backed up centrally

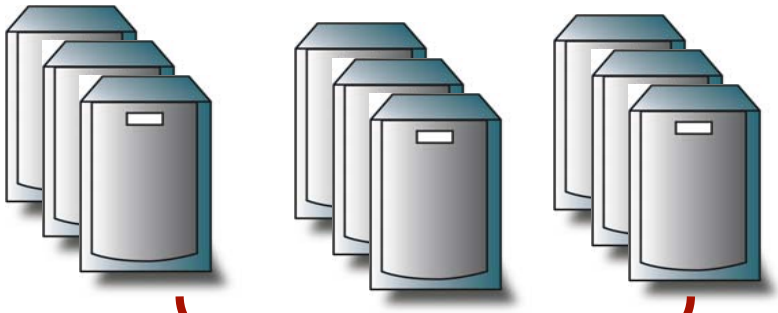
Services deliver the information you want, when you want it, how you want it, and where you want it



The Workplace of Tomorrow

Services Oriented Architecture

Server Farm



Single or group of servers that host applications, data storage and deliver services to clients

Single access point

Delivery of information is controlled through a single interface managed by software such as CITRIX and Microsoft

Connected Clients

Client is used as the interface to push and pull information and applications from the servers freeing employees to connect from either the office or the road securely

Mobile Client

Desktop Client

Enterprise Challenges

- **Demand for Stronger Security**
  - **Privacy:** For personal data confidentiality
  - **Protection:** From viruses, worms, etc.
- **Demand for a Simplified IT Management**
  - Remote management and better serviceability
- **Demand for a Lower TCO**
  - To reduce the operational cost of technology over its lifecycle

Demand for Higher-Level Security

As much as 60% of corporate data resides unprotected on desktop PCs and laptops

70% of companies go out of business after a major data loss

35% of PCs sold to businesses are laptops. 10% of laptops are stolen annually

Japan Tightens Personal Data Protection

Starting April 1, businesses throughout Japan, including foreign companies, must comply with legislation that sets out new rules for handling personal data.

IDG News Service
Tuesday, March 29, 2005

Beware the 'pod slurping' employee

"Now the greatest threat is very much inside the organization, but I'm not sure there are that many businesses (that) have realized it's possible to plug in an iPod and just walk away with the whole business in a matter of minutes."

CNET News.com, 02/16/06

Sources: IDC, Gartner Group and DTI

Demand for a Simplified IT Management

- **Remote Management**
  - Administrators can update & maintain user applications & settings without user input
    - Central administration minimizes downtime & support costs
- **Better Serviceability**
  - Connected Clients are plug'n'play appliances
    - Failed clients can be replaced out-the-shelf without any configuration or setup issues – minimizing downtime and improve productivity

Source: Gartner Group

Demand for Lower TCO

- **Reduce ongoing costs of hardware and software**
- **Reduce the number of IT staff required to maintain infrastructure**
- **Reduce the total power consumption of computing devices in the workplace**

A PC costs more than USD 8,000 for technical support, hardware management ,hardware replacement and service calls each year

Source:Gartner

VIA Connected Client Computing Initiative Vision

- **Creating Efficient and Innovative Devices**
  - Develop Connected Client Platform Solutions that enable our customer to create innovative new client device
- **Overcoming the Technical Challenges**
  - Help enterprise IT managers to overcome the challenges of security in a global business environment
- **Empowering IT Managers to increase Enterprise efficiency and cost savings**
  - Helping enterprise ensure security and have more manageability over the system

Example: Electricity Cost

Electricity Cost = Units of Electricity (kWHr) x Unit cost (USD)
Unit of Electricity (kWHr)= Kilowatt (kW) x Time (Hours)

For example: A company with 2000 PC users, running for 8 hours per day for 200 working days per year:

General PC Platform (2.6GHz processor + chipsets+ 512MB DDR):

power consumption=103.1Watts= 0.1031kW

VIA Connected Client Platform (Eden 1.2GHz + CN700 + VT8237R plus + 512MB DDR2)

power consumption=13.9Watts=0.0139kW

Total Work Hours for 1 year

200days x 8 hours x 2000 PCs = 3,200,000 Hours

Total Units of electricity needed

3,200,000 Hours x 0.1031kW = 329,920 units (General PC solution)

3,200,000 Hours x 0.0139kW = 44,480 units (VIA solution)

Each Unit of electricity = 3.465NT (Source from Taipower)

Total Electricity Cost for General PC system per year = NT 1,143,172.8K

Total Electricity Cost for VIA Connected Client System per year = NT 154,123.2K

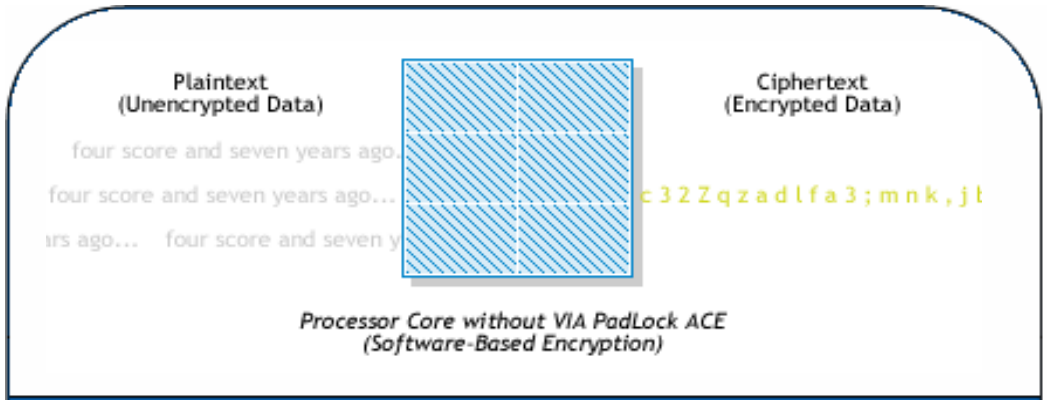
Annually 86.5% Electricity Cost Savings by using VIA Connected Client platform

World's Most Advanced x86 Security

- **VIA Processor integrated world's fastest x86 security engine**
  - Protects the massive amounts of transmitted data across networks with real-time security
- **World's most comprehensive set of security tools**
  - Gives developers the same set of security tools used by many of the world's governments to improve security offered with terminal client software
- **World's best quantum random number generator**
  - Provides an unshakable foundation for security of keys exchanged and data transmitted on thin client networks
- **Smoothest secure system performance**
  - Hardware encryption without using up valuable processor cycles, ensures smooth operation of terminal client software

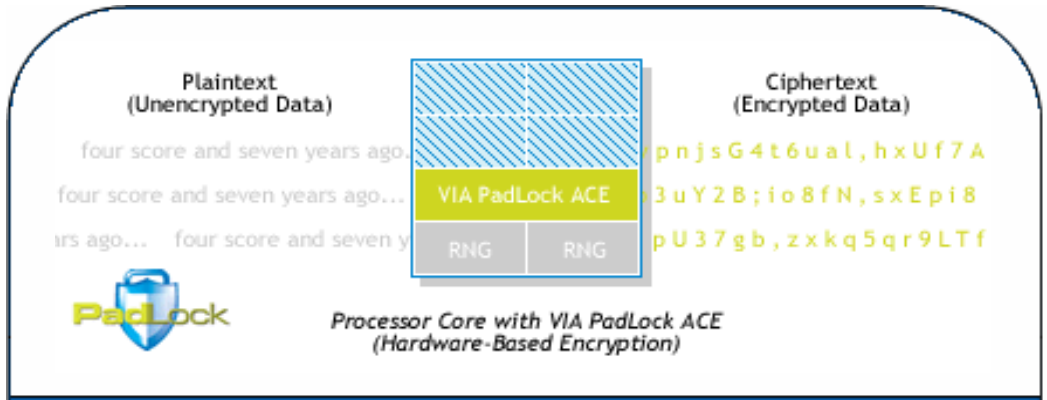
VIA PadLock Security is Better

- **Encryption of data in real-time**



Software based encryption:
1GB of data = 8.006 sec*
Avg. CPU Utilization = 99%

Using General PC processor @2.4Ghz



Hardware based encryption:
1GB of data = 0.57 sec*
Avg. CPU Utilization = 54%

Using VIA Eden 1GHz with VIA PadLock

- **More Secure**
  - Encryption algorithms in hardware makes it harder for hackers to guess valuable primer data

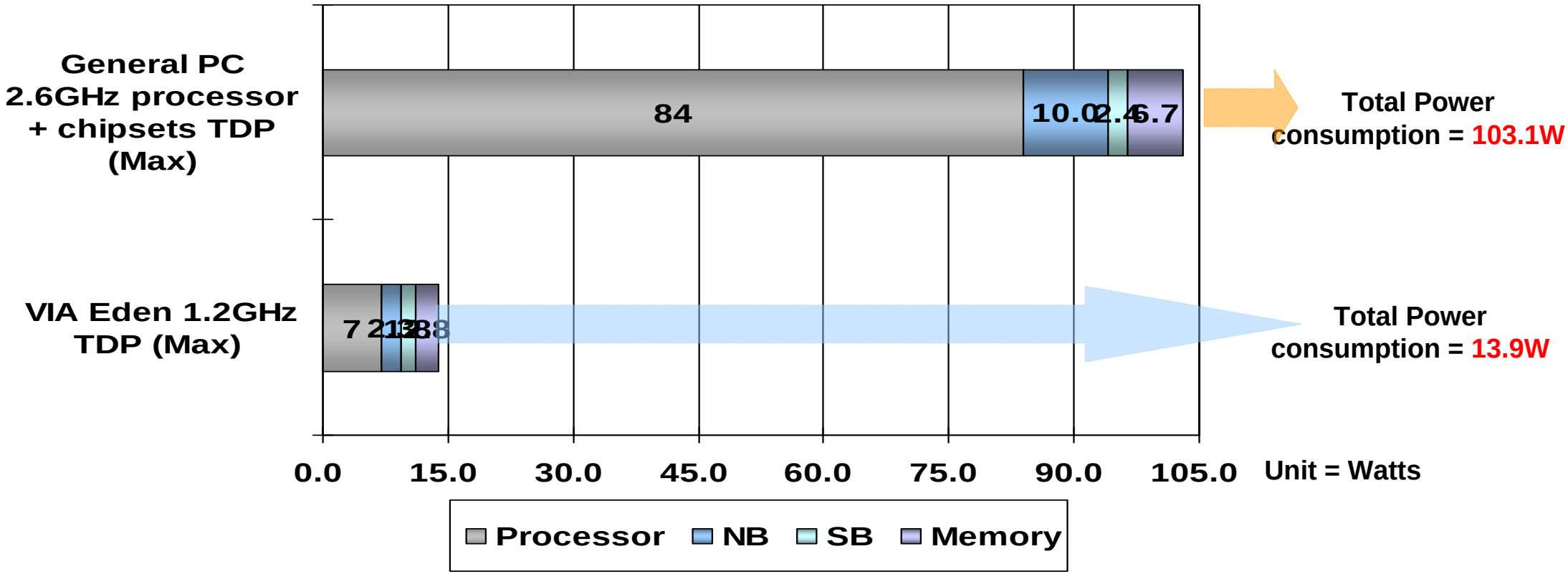
PadLock

* Based on AES encryption using ECB modes

Bridging the Technology Gap Between Connected Clients and Mainstream PCs

- **PC –Level Performance**
  - 1.0GHz and above Processor Speed
  - DDR2 Memory Interface
  - 400MHz Bus Bandwidth
- **PC-Level Connectivity**
  - Wi-Fi
  - Gigabit-Ethernet
- **PC-Level Features**
  - Integrated DX7 or DX9 graphics
  - Integrate Video feature (MPEG decode) support in VIA chipsets

Example: Using DDR2 Memory While Lowering Power Consumption



Remark:

- VIA Platform : Eden 1.2GHz + CN700 + VT8237R plus + 512MB DDR2
- General PC Platform: 2.6GHz processor + chipsets+ 512MB DDR

DDR2 Platform offers improved bandwidth while lowering power consumption

VIA Connected Client Platforms

Ultra Small Form Factor / Mobile

VIA Eden/ULV + VIA CX700 +VIA Wireless module VT6656

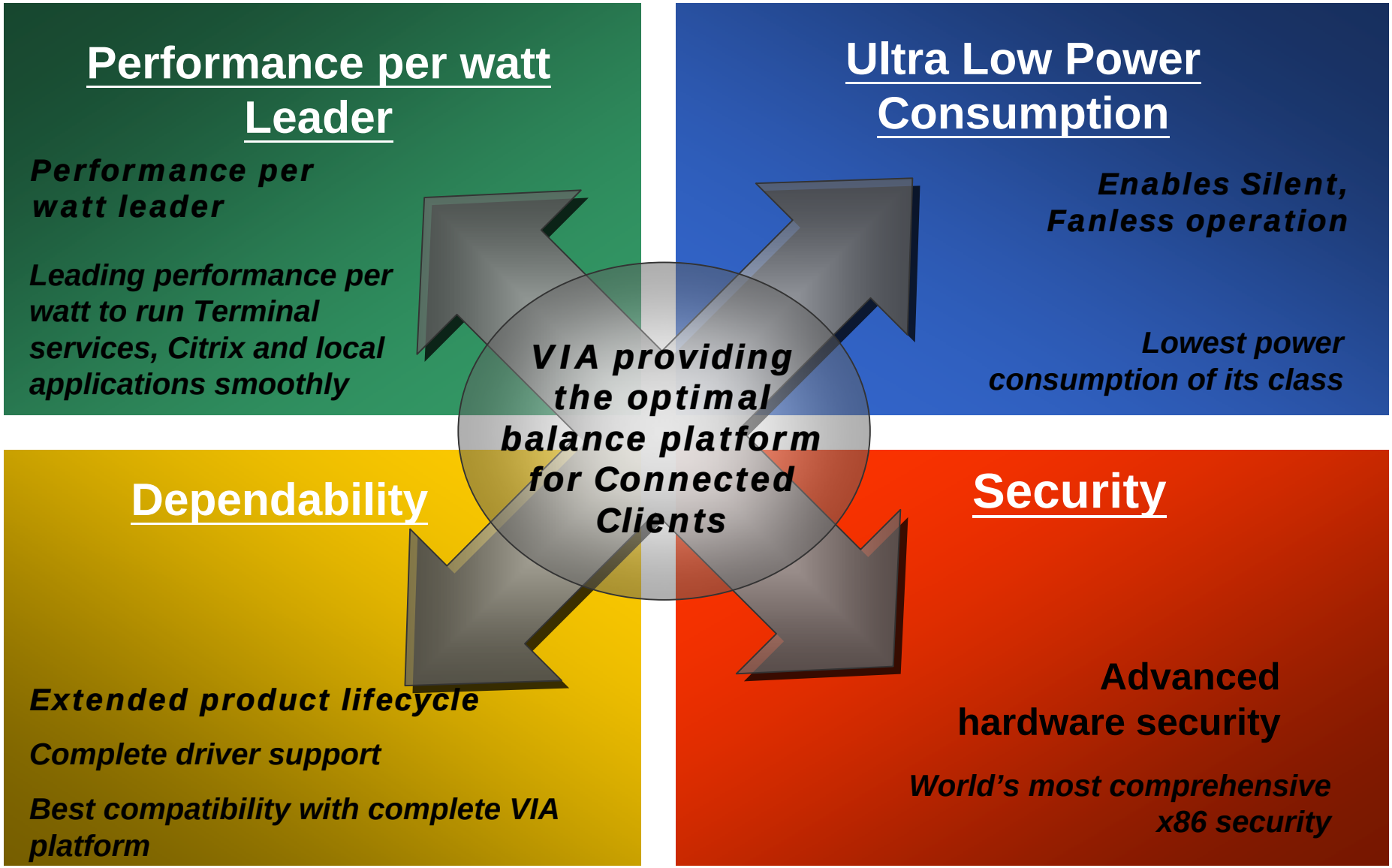
- **Fanless Design**
- **Smallest x86 size for sleek designs**
- **Versatile Display**
  - DuoView+™,CRT,DVO ports
  - Integrated LVDS/DVI combo transmitter
- **Mobile-PC class Power Management**
- **High Integration**
  - Integrated graphics and MPEG-2 acceleration

PC Performance

VIA C7 + VIA CN700 + VIA VT8237R plus
+VIA Wireless module VT6656

- **High Performance**
  - •CPU Speed up to 2.0GHz
- **High Bandwidth**
  - •FSB 400MHz, DDR2 400/533
- **Versatile Display**
  - DuoView+™,CRT,DVO ports
- **Mobile-PC class Power Management**

Providing the Optimal Balance



Success with VIA !

Over 90% of the Connected Client Providers chose VIA

Call to Action

- Enterprises:
  - To do small scale adoption of connected clients, To provide more case study in different verticals for reference
- System Providers:
  - Create more efficient and innovative systems
  - Joint promote to potential verticals
- Software Partners
  - Optimize for best performance
  - Enable stronger security solution for the current wireless infrastructure

Thank You